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L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1998:763808 CAPLUS  
DOCUMENT NUMBER: 130:117157

ENTRY DATE: Entered STN: 07 Dec 1998  
 TITLE: NH radical reactions  
 AUTHOR(S): Hack, W.  
 CORPORATE SOURCE: Max-Planck-Institut für Stromungsforschung, Göttingen,  
 D-37073, Germany  
 SOURCE: N-Centered Radicals (1998), 413-466. Editor(s):  
 Alfassi, Zeev B. Wiley: Chichester, UK.  
 CODEN: 67ABAO  
 DOCUMENT TYPE: Conference; General Review  
 LANGUAGE: English  
 CLASSIFICATION: 74-0 (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 78

ABSTRACT:

A review with 441 refs. in which reactivity of various electronic states of imidogen radical NH are discussed, in particular electronic ground state X<sup>3</sup>Σ<sup>-</sup> and the first electronically excited singlet state a<sup>1</sup>A. Production and detection of ground state- and excited NH radicals is discussed, along with quenching of excited NH and elementary reactions of these radicals. The reactions included reactions in the N-H system (with H, H<sub>2</sub>, N, N<sub>2</sub>, NH, NH<sub>3</sub>, N<sub>2</sub>H<sub>4</sub>), in the N-H-O system (with O, NO, H<sub>2</sub>O, O<sub>2</sub>, H<sub>2</sub>O<sub>2</sub>, OH), in the N-H-C(Si) system (with SiH<sub>4</sub>, saturated hydrocarbons, unsatd. hydrocarbons), in the N-H-C-O system (with CO, CO<sub>2</sub>, MeOH), in the N-H-halogen system (with HF, HCl, HCN, F<sub>2</sub>, Cl<sub>2</sub>, ClF).

SUPPL. TERM: review imidogen radical reaction ground state excited;  
 photolysis imidogen radical reaction review  
 INDEX TERM: Reaction  
 Reaction kinetics  
 (reactions of imidogen radical in ground state)  
 INDEX TERM: Electronic excitation  
 Electronic transition  
 Photochemistry  
 Photolysis  
 Photolysis kinetics  
 (reactions of imidogen radical in ground state and electronically excited states)  
 INDEX TERM: Alkanes, reactions  
 Alkenes, reactions  
 ROLE: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (reactions of imidogen radical in ground state and electronically excited states)  
 INDEX TERM: 67-56-1, Methanol, reactions 74-90-8, Hydrogen cyanide, reactions 124-38-9, Carbon dioxide, reactions 302-01-2, Hydrazine, reactions 630-08-0, Carbon monoxide, reactions 3352-57-6, Hydroxyl, reactions 7647-01-0, Hydrogen chloride, reactions 7664-39-3, Hydrogen fluoride, reactions 7664-41-7, Ammonia, reactions 7722-84-1, Hydrogen peroxide, reactions 7727-37-9, Nitrogen, reactions 7782-41-4, Fluorine, reactions 7782-44-7, Oxygen, reactions 7782-50-5, Chlorine, reactions 7790-89-8, Chlorine fluoride (ClF) 7803-62-5, Silane, reactions 10102-43-9, Nitrogen oxide (NO), reactions 12385-13-6, Hydrogen atom, reactions 13774-92-0, Imidogen 17778-80-2, Oxygen atom, reactions 17778-88-0, Nitrogen atom, reactions  
 ROLE: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (reactions of imidogen radical in ground state and electronically excited states)  
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    43866 MCDONALD?/RAU
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L15 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2003:959696 CAPLUS  
DOCUMENT NUMBER: 140:257580  
ENTRY DATE: Entered STN: 09 Dec 2003  
TITLE: Environmental fate of sodium azide derived from  
automobile airbags  
AUTHOR(S): Betterton, Eric A.  
CORPORATE SOURCE: Department of Atmospheric Sciences, University of  
Arizona, Tucson, AZ, 85721-0081, USA  
SOURCE: Critical Reviews in Environmental Science and  
Technology (2003), 33(4), 423-458  
CODEN: CRETEK; ISSN: 1064-3389  
PUBLISHER: CRC Press LLC  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English  
CLASSIFICATION: 59-0 (Air Pollution and Industrial Hygiene)  
ABSTRACT:

A review. The environmental fate of sodium azide ( $\text{NaN}_3$ ) is of considerable interest, given the recent surge in production to satisfy demand for automobile air bag inflators, where it serves as the principal active ingredient. Since the mid-1990s, demand for sodium azide has exceeded 5 million kg/yr and most passenger vehicles sold in the USA now contain approx. 300 g ( $\approx 0.7$  lb) of sodium azide. This has greatly increased the potential for accidental environmental releases and for human exposure to this highly toxic, broad-spectrum biocide. It can be argued that a new environmental threat has developed because not only are millions of kilograms of sodium azide now transported to and processed at air bag inflator factories, but also this substance is now widely distributed throughout the developed world in automobiles. Even if sodium azide were to be replaced by a more benign propellant in the future, the problem of safely disposing of large quantities of azide will remain as the vehicle fleet ages and is retired to scrap yards and shredders. Unfortunately, the environmental fate of sodium azide is unknown, so it is difficult to effectively manage releases. The problem is compounded by the fact that aqueous sodium azide is readily hydrolyzed to yield hydrazoic acid ( $\text{HN}_3$ ), a volatile substance that partitions strongly to the gas phase.

SUPPL. TERM: review sodium azide automobile airbag derived environmental  
fate  
INDEX TERM: Automobiles  
Vehicles  
(airbags; environmental fate of sodium azide derived from  
vehicle airbags)  
INDEX TERM: Air pollution  
Airbags (protective)  
Environmental pollution  
Human  
Toxicity

(environmental fate of sodium azide derived from automobile airbags)

INDEX TERM: 26628-22-8, Sodium azide  
 ROLE: POL (Pollutant); TEM (Technical or engineered material use); OCCU (Occurrence); USES (Uses)  
 (environmental fate of sodium azide derived from automobile airbags)

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AN 1915:10274 CAPLUS

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TI Behavior of certain hydrazine salts on decomposition by heat

AU Turrentine, J. W.

CS Cornell Univ.

SO Journal of the American Chemical Society (1915), 37, 1105-14

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA Unavailable

AB The decompose of hydrazine monochlorate by heat in neutral aqueous solns. yielded no HN3; HN3 was formed, however, in H2SO4 solution. The corresponding di-salt yielded HN3 both in the presence and absence of H2O4. The mono- and diperchlorate of N2H4 yielded no HN3 either in acidified or unacidified solns. When the dry crystallized salt was decomposed by heat in a current of CO2, HN3 was produced from the latter but not from the former. Both yielded gaseous Cl, N and O, and Cl and OH ions. The mono- and disulfates, under similar conditions, gave off H2O, H2S, SO2 and S, but no HN3. HN3 was not oxidized on boiling with H2O2 in alkaline solution; it may be separated from sulfites in this way, and this principle has been applied in a method (described) for detecting HN3 in presence of SO2.

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ACCESSION NUMBER: 2003:959696 CAPLUS

DOCUMENT NUMBER: 140:257580

ENTRY DATE: Entered STN: 09 Dec 2003

TITLE: Environmental fate of sodium azide derived from automobile airbags

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SOURCE: Critical Reviews in Environmental Science and Technology (2003), 33(4), 423-458

PUBLISHER: CODEN: CRETEK; ISSN: 1064-3389  
 DOCUMENT TYPE: CRC Press LLC  
 LANGUAGE: Journal; General Review  
 CLASSIFICATION: English  
 ABSTRACT: 59-0 (Air Pollution and Industrial Hygiene)

A review. The environmental fate of sodium azide ( $\text{NaN}_3$ ) is of considerable interest, given the recent surge in production to satisfy demand for automobile air bag inflators, where it serves as the principal active ingredient. Since the mid-1990s, demand for sodium azide has exceeded 5 million kg/yr and most passenger vehicles sold in the USA now contain approx. 300 g ( $\approx 0.7$  lb) of sodium azide. This has greatly increased the potential for accidental environmental releases and for human exposure to this highly toxic, broad-spectrum biocide. It can be argued that a new environmental threat has developed because not only are millions of kilograms of sodium azide now transported to and processed at air bag inflator factories, but also this substance is now widely distributed throughout the developed world in automobiles. Even if sodium azide were to be replaced by a more benign propellant in the future, the problem of safely disposing of large quantities of azide will remain as the vehicle fleet ages and is retired to scrap yards and shredders. Unfortunately, the environmental fate of sodium azide is unknown, so it is difficult to effectively manage releases. The problem is compounded by the fact that aqueous sodium azide is readily hydrolyzed to yield hydrazoic acid ( $\text{HN}_3$ ), a volatile substance that partitions strongly to the gas phase.

SUPPL. TERM: review sodium azide automobile airbag derived environmental fate  
 INDEX TERM: Automobiles  
 Vehicles  
 (airbags; environmental fate of sodium azide derived from vehicle airbags)  
 INDEX TERM: Air pollution  
 Airbags (protective)  
 Environmental pollution  
 Human  
 Toxicity  
 (environmental fate of sodium azide derived from automobile airbags)  
 INDEX TERM: 26628-22-8, Sodium azide  
 ROLE: POL (Pollutant); TEM (Technical or engineered material use); OCCU (Occurrence); USES (Uses)  
 (environmental fate of sodium azide derived from automobile airbags)  
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=> s macdonald?/rau  
L19 45013 MACDONALD?/RAU

=> s macdonald/rau  
L20 557 MACDONALD/RAU

=> s 1932/RPY  
L21 33663 1932/RPY

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YOU HAVE REQUESTED DATA FROM 9 ANSWERS - CONTINUE? Y/(N):y

L22 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:645866 CAPLUS

DOCUMENT NUMBER: 148:555843

ENTRY DATE: Entered STN: 30 May 2008

TITLE: Bubbles, gating, and anesthetics in ion channels

AUTHOR(S): Roth, Roland; Gillespie, Dirk; Nonner, Wolfgang;  
Eisenberg, Robert E.

CORPORATE SOURCE: Max-Planck Institut fuer Metallforschung, Stuttgart,  
Germany

SOURCE: Biophysical Journal (2008), 94(11), 4282-4298  
CODEN: BIOJAU; ISSN: 0006-3495

PUBLISHER: Biophysical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

CLASSIFICATION: 6-7 (General Biochemistry)

# ABSTRACT:

We suggest that bubbles are the bistable hydrophobic gates responsible for the on-off transitions of single channel currents. In this view, many types of channels gate by the same phys. mechanism-dewetting by capillary evaporation-but different types of channels use different sensors to modulate hydrophobic properties of the channel wall and thereby trigger and control bubbles and gating. Spontaneous emptying of channels has been seen in many simulations. Because of the physics involved, such phase transitions are inherently sensitive, unstable threshold phenomena that are difficult to simulate reproducibly and thus convincingly. We present a thermodyn. anal. of a bubble gate using morphometric d. functional theory of classical (not quantum) mechanics. Thermodyn. anal. of phase transitions is generally more reproducible and less sensitive to details than simulations. Anesthetic actions of inert gases - and their interactions with hydrostatic pressure (e.g., nitrogen narcosis) - can be easily understood by actions on bubbles. A general theory of gas anesthesia may involve bubbles in channels. Only expts. can show whether, when, or which channels actually use bubbles as hydrophobic gates: direct observation of bubbles in channels is needed. Existing expts. show thin gas layers on hydrophobic surfaces in water and suggest that bubbles nearly exist in bulk water.

SUPPL. TERM: ion channel microcapillary bubble gating switch noble gas anesthetic  
INDEX TERM: Anesthetics  
(bubbles-dependent gating model for ion channels suggests mechanism for hydrostatic pressure-associated anesthetic action of inert gases)  
INDEX TERM: Noble gases, biological studies  
ROLE: BSU (Biological study, unclassified); BIOL (Biological study)  
(bubbles-dependent gating model for ion channels suggests mechanism for hydrostatic pressure-associated anesthetic action of inert gases)  
INDEX TERM: Capillary tubes  
Molecular switches  
(bubbles-dependent gating model suggests ion channels exhibit microcapillary-like behavior by switching between water-filled conductive state and vapor-locked nonconductive state)  
INDEX TERM: Ion channels  
ROLE: BSU (Biological study, unclassified); BIOL (Biological study)  
(bubbles-dependent gating model suggests ion channels exhibit microcapillary-like behavior by switching between water-filled conductive state and vapor-locked nonconductive state)  
INDEX TERM: Wetting  
(dewetting; bubbles-dependent gating model suggests ion channels exhibit microcapillary-like behavior by switching between water-filled conductive state and vapor-locked nonconductive state)  
INDEX TERM: Pressure  
(hydrostatic; bubbles-dependent gating model for ion channels suggests mechanism for hydrostatic pressure-associated anesthetic action of inert gases)  
INDEX TERM: Bubbles  
(microbubbles; bubbles-dependent gating model suggests ion channels exhibit microcapillary-like behavior by switching between water-filled conductive state and vapor-locked nonconductive state)  
INDEX TERM: 7732-18-5, Water, biological studies  
ROLE: BSU (Biological study, unclassified); BIOL (Biological study)

(bubbles-dependent gating model suggests ion channels exhibit microcapillary-like behavior by switching between water-filled conductive state and vapor-locked nonconductive state)

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L22 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:794911 CAPLUS  
 DOCUMENT NUMBER: 147:426264  
 ENTRY DATE: Entered STN: 22 Jul 2007  
 TITLE: Ascorbic acid  
 AUTHOR(S): Johnston, Carol S.; Steinberg, Francene M.; Rucker,  
 Robert B.  
 CORPORATE SOURCE: Department of Nutrition, Arizona State University,  
 Mesa, AZ, USA  
 SOURCE: Handbook of Vitamins (4th Edition) (2007), 489-520.

Editor(s): Zemleni, Janos. CRC Press LLC: Boca  
Raton, Fla.  
CODEN: 69JLTW; ISBN: 978-0-8493-4022-2  
Conference; General Review  
English  
18-0 (Animal Nutrition)

DOCUMENT TYPE:  
LANGUAGE:  
CLASSIFICATION:  
ABSTRACT:

A review on ascorbic acid (vitamin C), including its chemical and food sources. The history of ascorbic acid is discussed, along with its nomenclature and structure, phys. and chemical properties, chemical and biol. synthesis, biochem. functions, relationship with glutathione, role as an antioxidant, link with gene expression, and metabolism and regulation. The selected clin. features important to ascorbic acid status are examined, together with progression of selected chronic diseases, ascorbic acid requirements, allowances, and upper limits, iron-related disorders, and vitamin B12.

SUPPL. TERM: review ascorbic acid antioxidant chronic disease nutrition  
INDEX TERM: Disease, animal  
(chronic; poor ascorbic acid status was related to  
atherosclerosis, cataract, cancer and worsening of  
respiratory function in smoker and elderly patient)  
INDEX TERM: Aging, animal  
(elderly; poor ascorbic acid status was related to  
atherosclerosis, cataract and worsening of respiratory  
function in smoker and elderly patient)  
INDEX TERM: Antioxidants  
Atherosclerosis  
Cataract  
Human  
Metabolism, animal  
Nutrition, animal  
(poor ascorbic acid status was related to  
atherosclerosis, cataract and worsening of respiratory  
function in smoker and elderly patient)  
INDEX TERM: Neoplasm  
(poor ascorbic acid status was related to  
atherosclerosis, cataract, cancer and worsening of  
respiratory function in smoker and elderly patient)  
INDEX TERM: Scurvy  
(poor ascorbic acid status was related to  
atherosclerosis, scurvy, cataract and worsening of  
respiratory function in smoker and elderly patient)  
INDEX TERM: 50-81-7, Ascorbic acid, biological studies 70-18-8,  
Glutathione, biological studies  
ROLE: BSU (Biological study, unclassified); BIOL (Biological  
study)  
(poor ascorbic acid status was related to  
atherosclerosis, cataract and worsening of respiratory  
function in smoker and elderly patient)  
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ACCESSION NUMBER: 2006:1286405 CAPLUS

DOCUMENT NUMBER: 147:42884

ENTRY DATE: Entered STN: 08 Dec 2006

TITLE: Anodic bonding

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SOURCE: International Materials Reviews (2006), 51(5), 273-311

CODEN: INMREO; ISSN: 0950-6608

PUBLISHER: Maney Publishing

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

CLASSIFICATION: 76-0 (Electric Phenomena)

ABSTRACT:

A review. Originally developed in the late 1960s, anodic bonding, also known as electrostatic bonding, field-assisted bonding or Mallory bonding, has become one of the most important silicon packaging techniques. Despite its industrial relevance the bonding mechanism is mainly only qual. understood and is almost solely applied to the bonding of silicon to Pyrex glass. The objective of the present paper is to review the current state of knowledge of the anodic bonding process. Possible material combinations and current scientific and industrial applications of this bonding technique are reviewed. The various aspects of the bonding process, such as the creation of intimate contact, the cation movement in the glass and the interfacial chemical reactions, are discussed in

detail and related to the external current measured during bonding to describe the bonding process quant. A better understanding of the process itself should help not only to improve the process control and the quality of devices, but also to broaden the application of this successful bonding technique to more challenging designs, to smaller device sizes and to systems other than silicon-Pyrex glass.

SUPPL. TERM: review anodic bonding silicon glass packaging

INDEX TERM: Diffusion  
Electric current  
Electronic packaging process  
Glass substrates  
Interfacial reaction  
Joining

(anodic bonding)  
INDEX TERM: 7440-21-3, Silicon, processes

ROLE: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(anodic bonding)  
REFERENCE COUNT: 227 THERE ARE 227 CITED REFERENCES AVAILABLE FOR THIS RECORD.

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L22 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:142631 CAPLUS  
 DOCUMENT NUMBER: 140:159044  
 ENTRY DATE: Entered STN: 22 Feb 2004  
 TITLE: Mold-resistant corrugated cardboard for void-forming structures  
 INVENTOR(S): Comeau, Dominic Hamel; Rosenblat, Michael L.  
 PATENT ASSIGNEE(S): Voidform International Ltd., Can.  
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 INT. PATENT CLASSIF.:

MAIN: B32B001-00  
 US PATENT CLASSIF.: 428178000  
 CLASSIFICATION: 5-2 (Agrochemical Bioregulators)  
 Section cross-reference(s): 43  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040033343	A1	20040219	US 2003-459287	20030611
US 6794017	B2	20040921		
CA 2431614	A1	20031212	CA 2003-2431614	20030610
			US 2002-388134P	P 20020612

PRIORITY APPLN. INFO.:

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20040033343	ICM	B32B001-00
	INCL	428178000
	IPCI	B32B0001-00 [ICM,7]
	IPCR	B32B0001-00 [I,C*]; B32B0001-00 [I,A]; B32B0003-28 [I,C*]; B32B0003-28 [I,A]; D21H0011-00 [I,C*]; D21H0011-00 [I,A]; E02D0031-00 [I,C*]; E02D0031-10 [I,A]; E04B0005-32 [I,C*]; E04B0005-32 [I,A]; E04C0003-30 [I,C*]; E04C0003-34 [I,A]; E04G0015-00 [I,C*]; E04G0015-06 [I,A]; B31F0001-20 [I,C*]; B31F0001-28 [I,A]; B32B0027-08 [I,C*]; B32B0027-08 [I,A]; D21H0017-00 [N,C*]; D21H0017-28 [N,A]; D21H0021-14 [N,C*]; D21H0021-36 [N,A]; D21H0027-30 [I,C*]; D21H0027-40 [I,A]
	NCL	428/178.000; 428/182.000; 156/292.000; 162/161.000
	ECLA	B32B027/08; B31F001/28B1; D21H027/40; E02D031/10; E04B005/32; E04C003/34; E04G015/06B; N21H; N21H
CA 2431614	IPCI	D21H0021-36 [ICM,7]; D21H0021-14 [ICM,7,C*]; D21F0011-12 [ICS,7]; D21F0011-00 [ICS,7,C*]; B31F0001-20 [ICS,7]
	IPCR	B31F0001-20 [I,C*]; B31F0001-20 [I,A]; D21F0011-00 [I,C*]; D21F0011-12 [I,A]; D21H0021-14 [I,C*]; D21H0021-36 [I,A]

ABSTRACT:

Corrugated cardboard that resists the growth of mold includes single and double face liners produced with pulp and starch, where the latter is diluted with water to which biocides have been added. The liner biocides include 5-chloro-2-methyl-4-isothiazolin-3-one, hypochlorite and sodium hydroxide and sodium bromide. A fluted medium is sandwiched between the single and double face liners with an adhesive that is produced with diluted starch and to which biocides have also been added. The biocides in the adhesive include 1,2-benzothiazol-3(2H)-one and poly[oxyethylene(dimethyliminio)ethylene dichloride].

SUPPL. TERM: mold corrugated cardboard fungicide  
 INDEX TERM: Paperboard  
 (corrugated; mold-resistant corrugated cardboard for void-forming structures)  
 INDEX TERM: Biocides  
 (in mold-resistant corrugated cardboard for void-forming structures)  
 INDEX TERM: Fungicides  
 Mold (fungus)  
 (mold-resistant corrugated cardboard for void-forming structures)  
 INDEX TERM: 2634-33-5, 1,2-Benzisothiazol-3(2H)-one 7647-15-6, Sodium bromide., biological studies 14380-61-1, Hypochlorite 26172-55-4, 5-Chloro-2-methyl-4-isothiazolin-3-one

31512-74-0

ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(in mold-resistant corrugated cardboard for void-forming structures)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD.

REFERENCE(S): (1) Kell; US 3109217 A 1963  
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(3) Oliver; US 3358960 A 1967  
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L22 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:550899 CAPLUS

DOCUMENT NUMBER: 137:89509

ENTRY DATE: Entered STN: 25 Jul 2002

TITLE: Saturated halogenated aliphatic hydrocarbons: two to four carbons

AUTHOR(S): Reid, Jon B.

CORPORATE SOURCE: University of Cincinnati, Cincinnati, OH, USA

SOURCE: Patty's Toxicology (5th Edition) (2001), Volume 5, 99-204. Editor(s): Bingham, Eula; Cohrsen, Barbara; Powell, Charles H. John Wiley & Sons, Inc.: New York, N. Y.

CODEN: 69CWST; ISBN: 0-471-31943-0

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

CLASSIFICATION: 4-0 (Toxicology)

ABSTRACT:

A review. Properties and toxicol. of saturated halogenated aliphatic hydrocarbons with two to four carbons are comprehensively surveyed.

SUPPL. TERM: review toxicol halogenated hydrocarbon

INDEX TERM: Hydrocarbons, biological studies

ROLE: BSU (Biological study, unclassified); BIOL (Biological study)

(halo, C2-4; properties and toxicol. of saturated halogenated aliphatic hydrocarbons with two to four carbons)

REFERENCE COUNT: 398 THERE ARE 398 CITED REFERENCES AVAILABLE FOR THIS RECORD.

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ACCESSION NUMBER: 2001:503511 CAPLUS

ENTRY DATE: Entered STN: 12 Jul 2001

TITLE: Assessing the Evidence for Remodelling of the Airway in Asthma

AUTHOR(S): Wilson, John W.; Bamford, Tiffany L.

CORPORATE SOURCE: Department of Respiratory Medicine, Monash Medical School and The Alfred Hospital, Prahran, 3181, Australia

SOURCE: Pulmonary Pharmacology & Therapeutics (2001), 14(3), 229-247

CODEN: PPTHFJ; ISSN: 1094-5539

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

Asthma is now described as being characterized by reversible airflow obstruction, with bronchial inflammation and tissue remodelling of the airway wall. The description of remodelling has been usefully invoked to account for a component of airflow obstruction that is unresponsive to usual bronchodilator therapy. It is crucial to examine critically the evidence for this view, particularly the quantitation of specific changes in the epithelium, mucus glands, cell infiltrate, collagen, vessels and smooth muscle of the bronchial wall. The useful tools of immunohistochem. and mol. biol. combined with airway biopsy and well-designed clin. trials will be essential to determine the specific roles of cells and cytokines in airway remodelling in asthma. (C) 2001 Academic Press. (c) 2001 Academic Press.

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L22 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:636245 CAPLUS

ENTRY DATE: Entered STN: 13 Sep 2000

TITLE: Apparatus for forming voids under concrete floors

INVENTOR(S): Rosenblat, Michael L.; Isles, Timothy J.; Dufault,  
Louis C.

PATENT ASSIGNEE(S): Void Form International Ltd., Can.

SOURCE: U.S., 9 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:  
MAIN: B28B007-28  
SECONDARY: B28B007-34

US PATENT CLASSIF.: 249184000; 249DIG2; 249061000; 249185000; 052792100;  
052795100; 493964000; 493966000; 493390000; 229120170

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6116568	A	20000912	US 1998-70302	19980430
PRIORITY APPLN. INFO.:			US 1998-71974P	P 19980120
PATENT CLASSIFICATION CODES:				
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES		
US 6116568	ICM	B28B007-28		
	ICS	B28B007-34		
	INCL	249184000; 249DIG2; 249061000; 249185000; 052792100; 052795100; 493964000; 493966000; 493390000; 229120170		
	IPCI	B28B0007-28 [ICM,7]; B28B0007-34 [ICS,7]		
	IPCR	B28B0007-28 [I,C*]; B28B0007-28 [I,A]; E02D0027-01 [I,C*]; E02D0027-01 [I,A]; E04G0009-08 [I,C*]; E04G0009-08 [I,A]; E04G0009-10 [I,C*]; E04G0009-10 [I,A]		
	NCL	249/184.000; 052/792.100; 052/795.100; 229/120.170; 229/120.250; 229/120.360; 249/061.000; 249/185.000; 249/DIG.002; 493/390.000; 493/964.000; 493/966.000		
	ECLA	B28B007/28; E02D027/01; E04G009/08; E04G009/10		

ABSTRACT:

A reinforced box-like structure for forming a void area in a concrete

formation. The structure includes a bottom panel having a plurality of spaced apart, parallel base partitions and a top panel having a plurality of spaced apart, parallel top partitions. The base partitions extend across the bottom panel and in a direction normal to the bottom panel, and the top partitions extend across the top panel and in a direction normal to the top panel. Each of the base partitions and top partitions include a plurality of double-thickness walls with a plurality of slots therein and flat top edges between the slots. The structure is assembled by superimposing the top panel over the bottom panel such that the base partitions extend transversely relative to the top partitions. Thus, the slots in the base partitions register in interlocking relationship with the corresponding slots in the top partitions, wherein the base partitions extend substantially to the top panel and the top partitions extend substantially to the bottom panel to create a cellular box-like structure that generally fills a space between the bottom panel and top panel with the flat top edges engaging the respective top or bottom partition.

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L22 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1999:505202 CAPLUS  
DOCUMENT NUMBER: 131:291084  
ENTRY DATE: Entered STN: 16 Aug 1999  
TITLE: Metal-Based X-ray Contrast Media  
AUTHOR(S): Yu, Shi-Bao; Watson, Alan D.  
CORPORATE SOURCE: Torsten Almen Research Center, Nycomed Amersham  
Imaging, Wayne, PA, 19087, USA  
SOURCE: Chemical Reviews (Washington, D. C.) (1999), 99(9),  
2353-2377  
CODEN: CHREAY; ISSN: 0009-2665  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English  
CLASSIFICATION: 63-0 (Pharmaceuticals)  
Section cross-reference(s): 8

ABSTRACT:  
A review with 168 refs. Medical physics of x-ray contrast, metals, metal salts, and metal particulates, metal cluster complexes, organobismuth compds., and heavy metal complexes as x-ray contrast agents are discussed.

SUPPL. TERM: review metal x ray contrast media  
INDEX TERM: Imaging agents  
(contrast, radiog.; metal-based x-ray contrast media)  
INDEX TERM: Metals, biological studies  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)



(metal-based x-ray contrast media)

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 ACCESSION NUMBER: 1999:252555 CAPLUS  
 DOCUMENT NUMBER: 131:129767  
 ENTRY DATE: Entered STN: 26 Apr 1999  
 TITLE: Secondary metabolite biosynthesis: the first century  
 AUTHOR(S): Bentley, Ronald  
 CORPORATE SOURCE: Department of Biological Sciences, University of  
 Pittsburgh, Pittsburgh, PA, 15260, USA  
 SOURCE: Critical Reviews in Biotechnology (1999), 19(1), 1-40  
 CODEN: CRBTE5; ISSN: 0738-8551  
 PUBLISHER: CRC Press LLC  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English  
 CLASSIFICATION: 26-0 (Biomolecules and Their Synthetic Analogs)  
 Section cross-reference(s): 31, 34

ABSTRACT:

A review with 233 refs. on the biosynthesis of secondary metabolites up to 1965 is presented. The earliest suggestions for three of the four major pathways were speculative; for the isoprene rule, hypotheses date to 1877, for the polyketide rule to 1907, and for a role for amino acids in alkaloid biosynthesis to 1910. The fourth major pathway based on intermediates of the shikimic acid pathway has a much shorter history because shikimic acid itself was only identified as a primary metabolite in 1951. In addition to speculation, biomimetic syntheses were carried out in which chemists attempted to duplicate possible biosynthetic pathways in vitro. The classic example was Robinson's synthesis of tropinone in 1917. Direct examination of secondary metabolite biosynthesis was possible with the use of the isotopic tracer technique. This methodol., applied extensively to primary metabolism beginning in 1935 and to secondary metabolism from about 1950, was facilitated by the increasing availability of the <sup>14</sup>C isotope. With the use of isotopes as tracers, the broad outlines of secondary metabolite biosynthesis, reviewed here, were established in the period 1950 to 1965.

SUPPL. TERM: review secondary metabolite biosynthesis metabolic pathway  
 INDEX TERM: Metabolism  
 (anabolic; major pathways in the biosynthesis of  
 secondary metabolites)  
 INDEX TERM: Synthesis  
 (biomimetic; major pathways in the biosynthesis of  
 secondary metabolites of)  
 INDEX TERM: Metabolic pathways  
 (major pathways in the biosynthesis of secondary  
 metabolites)  
 INDEX TERM: Alkaloids, preparation  
 Polyketides  
 ROLE: BPN (Biosynthetic preparation); BIOL (Biological  
 study); PREP (Preparation)  
 (major pathways in the biosynthesis of secondary  
 metabolites of)  
 INDEX TERM: Radionuclides, preparation  
 ROLE: BSU (Biological study, unclassified); SPN (Synthetic  
 preparation); BIOL (Biological study); PREP (Preparation)  
 (major pathways in the biosynthesis of secondary  
 metabolites of)  
 INDEX TERM: Amino acids, reactions  
 ROLE: RCT (Reactant); RACT (Reactant or reagent)  
 (major pathways in the biosynthesis of secondary

metabolites of)  
INDEX TERM: Metabolic pathways  
(shikimate pathway; major pathways in the biosynthesis of  
secondary metabolites of)

INDEX TERM: 138-59-0P, Shikimic acid  
ROLE: BPN (Biosynthetic preparation); BSU (Biological study,  
unclassified); MFM (Metabolic formation); RCT (Reactant);  
BIOL (Biological study); FORM (Formation, nonpreparative);  
PREP (Preparation); RACT (Reactant or reagent)  
(major pathways in the biosynthesis of secondary  
metabolites of)

INDEX TERM: 532-24-1P, Tropinone  
ROLE: BPN (Biosynthetic preparation); SPN (Synthetic  
preparation); BIOL (Biological study); PREP (Preparation)  
(major pathways in the biosynthesis of secondary  
metabolites of)

REFERENCE COUNT: 235 THERE ARE 235 CITED REFERENCES AVAILABLE FOR THIS  
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